

Del. 1.00

Work Order ID 91311

October-04-12 1:09:53 PM

91311

Page 1

Item ID: D3183-045

Revision ID:

Item Name: Bearing Assembly

Start Date: 04/10/2012 Start Qty: 20.00

Required Date: 19/10/2012 Req'd Qty: 20.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: MLS Date: 12-10-04 Tooling:

QC: Date: SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3183

Rev C1

100

0.00

100

Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

Turn D3183-9 Cap as per Folio FA388Deburr

12/11/19

60

0

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

12/11/19

60

0

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

12/11/19

60

0

DAS
08
9-89

Work Order ID 91311

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Page 2

Item ID: D3183-045
Revision ID:
Item Name: Bearing Assembly

Accept

N900040100

Setup Start *NS1*
Stop *NS2*

Start Date: 04/10/2012 Start Qty: 20.00
Required Date: 19/10/2012 Req'd Qty: 20.00

20
20

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	Small Fab	0.00							
130									
Small Fab	Memo	0.00							
Small Fab	Press D3183-5 Bearing into D3183-9 Cap as per Dwg D3183.								

60x

12/11/20

140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									

AS
15
8-89

12/11/20

60
count

150	Identify as per dwg & Stock Location: 572 3573	0.00							
150									
Packaging	Memo	0.00							
Packaging									

12/11/21

60

Work Order ID 91311

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91311

Page 3

Item ID: D3183-045

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearing Assembly

Start Date: 04/10/2012 Start Qty: 20.00

20

Cust Item ID:

Required Date: 19/10/2012 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

12/11/22 *[Signature]**mf*

12-11-21

Picklist Print

October-04-12 1:09:56 PM

Page 1

Work Order ID: 91311

91311

Parent Item: D3183-045

D3183-045

Parent Item Name: Bearing Assembly

Start Date: 04/10/2012

Required Date: 19/10/2012

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP A04.02.18New issueKJ/DS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3183-5		Manufactured	No			110	Each	48.0000	1	20			
---------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--

D3183-5

Bearing

**

ES 12/11/20

392224

(100)

392196

(500)

Location

Loc Qty

Loc Code

ST235B

48

74851

1

77831

1

81506

19

89617

27

MDEL RINR1.000

Purchased

No

130

f

44.2229

0.0333

0.701053

MDFI RINR1 000

Delrin Round Bar 1"

**

2.625

12/11/19

Location

Loc Qty

Loc Code

MAT055

44.2229

117985

0.407

118392

6.2762

122582

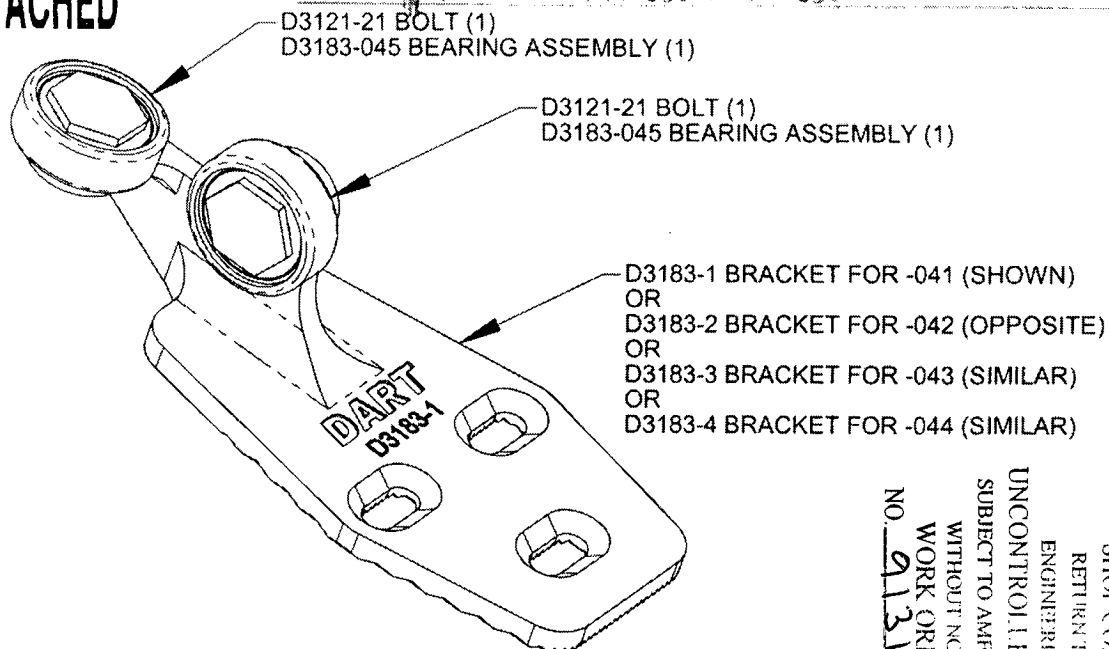
37.5397

2.625



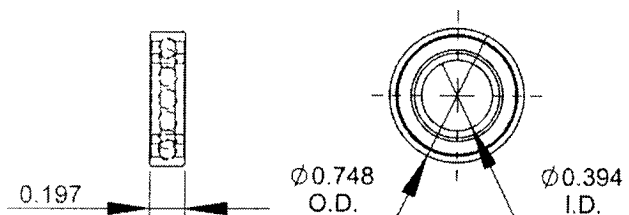
DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED
04/03/17
DEO ATTACHED



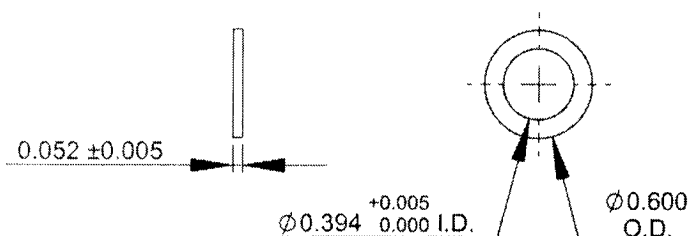
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 91311 M25
12-10-04



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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DAFT

QA COPY
1505

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 2 OF 4
DATE		TITLE	SCALE
04.02.17		BRACKET ASSEMBLY	1:2

DEO ATTACHED

RELEASED

SEE DETAIL B

4.8°

R0.19 (TYP)

R0.063

0.536

0.100

0.070 (TYP)

0.182

B

1.012

0.786

C

0.182

C'BORE Ø0.201x0.100 DEEP
DRILL #21 (Ø0.159)
TAP 10-32UNF-3B THRU
(2 PLACES)

1.18

4.17

3.881

0.830

0.500

0.218

0.515

1.030

1.90

DART
D3183-1

DETAIL A

4

R0.19 (TYP)

R0.19 (TYP)

R0.29 (TYP)

+0.002
Ø0.392 (TYP)
0.000

R0.50

2.799

100°

0.162

R0.19 (TYP)

R0.25 (TYP)

0.356 RUNOFF (TYP)

0.162

3.105

2.075 (RIDGES)

1.27

D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4

2) MATERIAL: 17-4 SS PER AMS 5604/5643

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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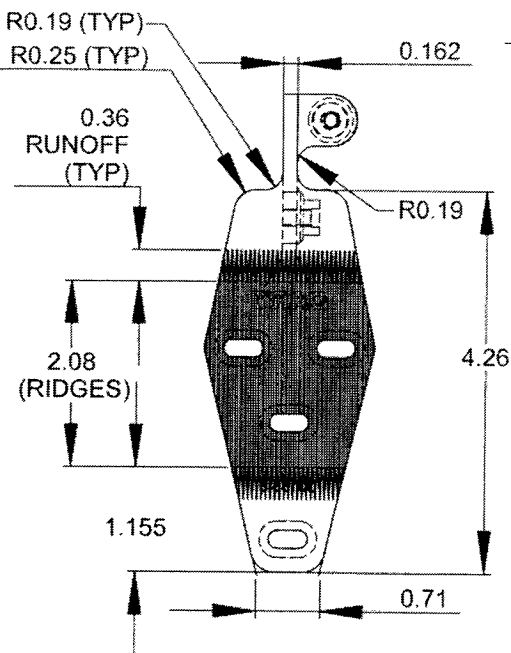
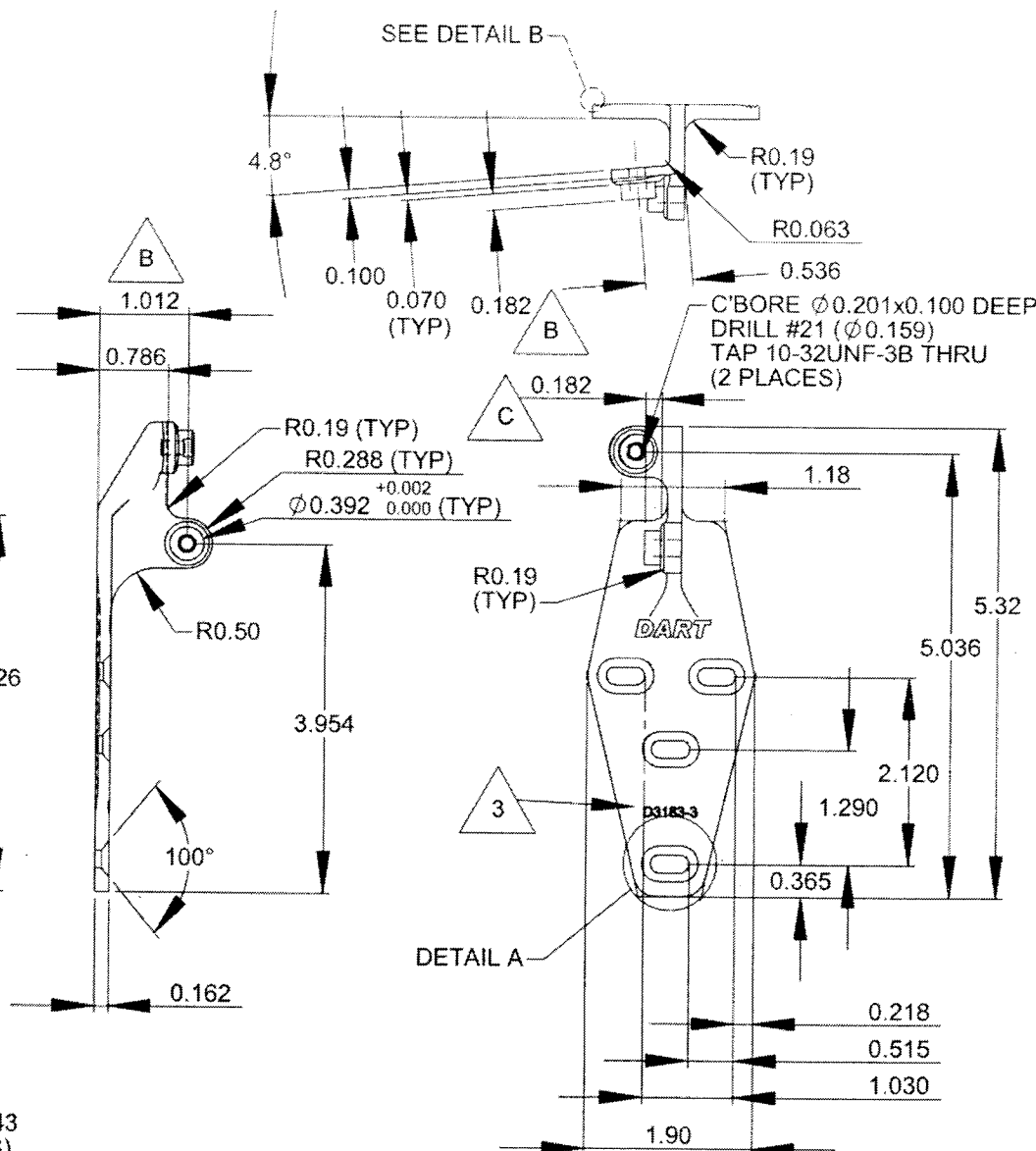
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91311

DART



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CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 3 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED

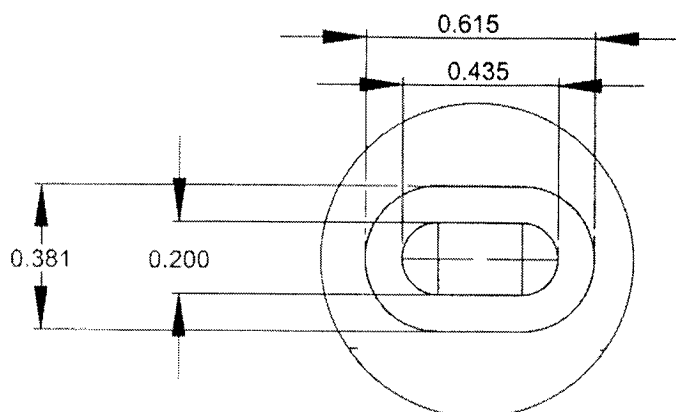
DEO ATTACHED

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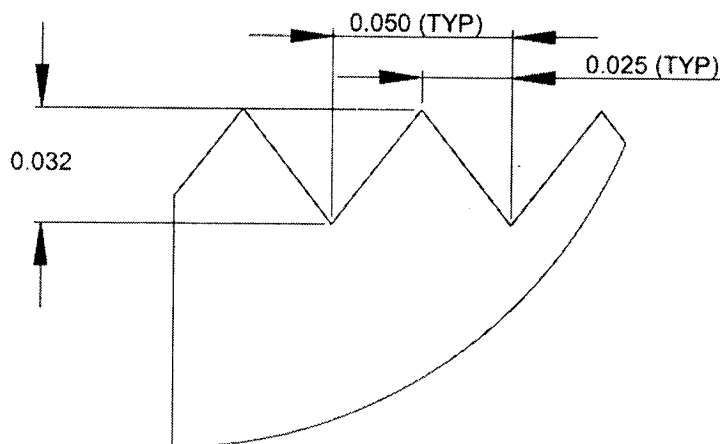
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



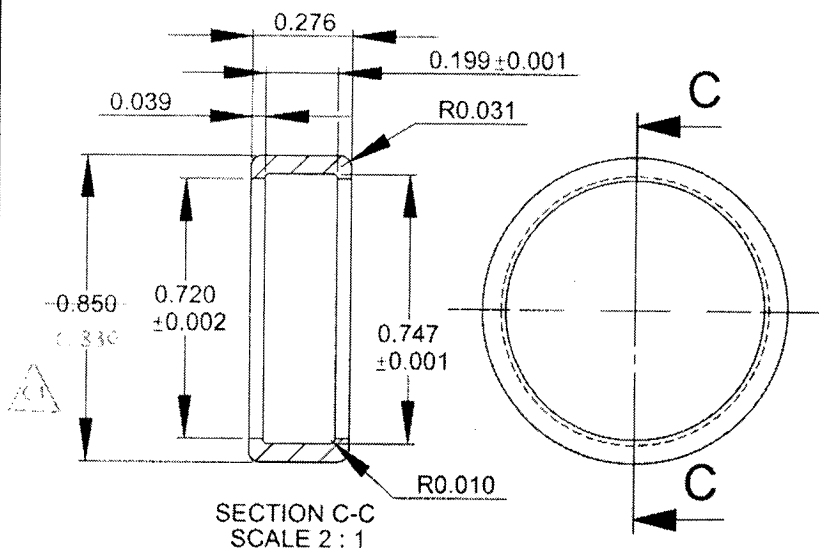
DETAIL A (2 : 1)

RELEASED
04.03.21

DEO ATTACHED



DETAIL B (20 : 1)



SECTION C-C
SCALE 2 : 1

D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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91311

91311

DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN P	CHECKED J	MFG. APPR. A	APPROVED MP		DE APPR. JH		
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10/06/30		DATE 10/06/30		

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

RELEASED
2010-07-22

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